

**Notice of Allowability**

Application No.

10/611,798

Examiner

Delma R. Flores Ruiz

Applicant(s)

SUN ET AL.

Art Unit

2828

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 06/30/2003.
2. ☒ The allowed claim(s) is/are 1-42.
3. ☒ The drawings filed on 30 June 2003 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All   b) ☐ Some\*   c) ☐ None   of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date 12/4/03; 6/18/04; 10/24/04
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

## DETAILED ACTION

### ***Allowable Subject Matter***

Claims 1 – 42 are allowed.

The following is an examiner's statement of reasons for allowance: Claim 1 recites a laser-based that generates pulsed laser emission and includes an extra-cavity optical modulator, method including the specific structure limitation of *applying RF pulse to the extra cavity optical modulator to produce a series of output transmitting states at an RF pulse repetition rate in which mutually adjacent ones of the output transmitting states are separated from each other by RF pulse intervals of sufficient uniformity to maintain variation of thermal loading of extra cavity optical modulator to within a preassigned operation tolerance and timing the production of the RF pulses and the generation of the laser output in response to control commands to achieve noncoincidence of an output transmitting state and a corresponding laser output during a noncoincident RF pulse to prevent working laser output and to achieve coincident of an output transmitting state and a corresponding laser output during a coincident RF pulse to transmit working laser output to achieve impingement of targets at different working laser output interval* which is neither anticipated or disclosed nor suggested in any piece of available prior art, which is neither anticipated nor obvious over the prior art of record.

Claim 27 recites a laser based, workpiece processing system that generates working laser output, method including the specific structure limitation of *extra cavity optical modulator for providing in response to control command an output transmitting state that permits laser output to propagate toward an electrically conductive link on a workpiece in the form of working laser output and an output blocking state that predominantly prevents working laser output from propagating toward the workpiece, and timing the production of the RF pulses and the generation of the laser outputs to achieve noncoincidence of an output transmitting state and a corresponding laser output during a noncoincidence RF pulse to prevent working laser output from damaging the workpiece whenever the positioning system is not addressing a selected electrically conductive link and timing of the RF pulses and the generation of the laser output to achieve coincidence of an output transmitting state and a corresponding laser output during a coincident RF pulse to transmit working laser output to achieve impingement of electrically conductive links at different working laser output intervals* which is neither anticipated or disclosed nor suggested in any piece of available prior art, which is neither anticipated nor obvious over the prior art of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."


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### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Delma R. Flores Ruiz whose telephone number is (571) 272-1940. The examiner can normally be reached on M - F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Min Sun Harvey can be reached on (571) -272-1835. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Delma R. Flores Ruiz  
Examiner  
Art Unit 2828

  
Min Sun Harvey  
Supervisor Patent Examiner  
Art Unit 2828